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1 SAFETY ADVICE

This product has been manufactured to comply with international safety standards. Please read the following safety precautions carefully.

MAINS SUPPLY : 90-260V AC 50/60Hz

Operate this product only from the type of power supply indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your local power company.

- Disconnect the product from the mains before you start any maintenance or installation procedures.

OVERLOADING: Do not overload a wall outlet, extension cord or adapter as this may result in electric fire or shock.

LIQUID: The product should not be exposed to liquid of any kind. In addition, no objects filled with liquid should be placed on the apparatus.

CLEANING: Disconnect the product from the wall outlet before cleaning. Use a light damp cloth (no solvents) to dust the product.

VENTILATION: The slots on top of the product must be left uncovered to allow proper airflow into the unit.

- Do not stand the product on soft furnishings or carpets.
- Do not stack electronic equipments on top of the product.

ATTACHMENTS: Do not use any unsupported attachments as these may be hazardous or cause damage to the product.

CONNECTION TO THE AERIAL: Disconnect the product from the mains before connecting or disconnecting the cable from the aerial. Failure to do so can damage the aerial.

CONNECTION TO THE TV: Disconnect the product from the mains before connecting or disconnecting the cable from the TV. Failure to do so can damage the TV.

LOCATION: Place the product indoors to avoid exposing it to lightning, rain or sun.

- Do not place it near a radiator or heat register.
- Make sure it has more than 10cm clearance from
- Do not block the openings with any object, and do not place the product on a bed, sofa, rug, or other similar surface.
- If you place the product on a rack or a bookcase, ensure that there is adequate ventilation and that you have followed the manufacturer's instructions for mounting.



- Do not place the product on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling product can cause serious injury to a child or adult, and serious damage to the appliance.

LIGHTNING, STORM or NOT IN USE: Unplug the product from the wall outlet and disconnect the antenna during a thunderstorm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-surges.

EXTRANEIOUS OBJECTS: Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts.

REPLACEMENT of PARTS: Replacement of parts may only be made by service technician specified by the manufacturer.

WARNING!

To avoid damage of the power cord or plug:

- Do not modify or process the power cord or plug arbitrarily.
- Do not bend or twist the power cord.
- Make sure to disconnect the power cord holding the plug.
- Keep heating appliances as far as possible from the power cord in order to prevent the cover vinyl from melting.
- The main plug shall remain readily operable.

To avoid electrical shock:

- Do not open the main body.
- Do not insert metal or inflammable objects inside the product.
- Do not touch the power plug with wet hands.
- Disconnect the power cord in case of lightning.

To avoid damage of product:

- Do not use the product when it is out of order. If you continue to use the product when defective, serious damage can be caused to it. Make sure to contact your local product distributor if the product is out of order.
- Do not insert metal or alien substance into the slots for the modules or smartcards.

It may cause damage to the product and reduce its life span.

The socket-outlet shall be installed near the equipment and shall be easily accessible.

2 QUICK SETUP

1. Check accessories

Please check the giftbox for completeness of accessories. Included should be: Receiver, Remote Control, external Power Supply, User Manual, 2 Batteries

2. Connect the Receiver to the TV Set

Connect your Receiver with your TV Set. Details can be found in the User Manual under chapter **4. How to connect your receiver.**

3. Connect the Receiver with the Satellite Antenna

Connect your Receiver with your Satellite Antenna. Details can be found in the User Manual under chapter **4. How to connect your receiver.**

4. Switch on the Receiver and TV Set

Switch on the AC-Power Switch on the rear side of the Receiver and then press the Standby button on the Receiver Front Panel (see User Manual for more details: Chapter **5.2 Front Panel** and **5.3 Rear Panel**)

5. Insert the Batteries

Insert the 2 Batteries into the battery case on the underside of the Remote Control. Please make sure that the Battery + and - Poles are correctly aligned.

6. Settings in the OSD Menu

After the Receiver has booted it will display the On-Screen Menu on your TV Set. Should this not be the case, please check the connections as well as the settings of your TV Set.



Please use the  key on your Remote Control to choose the Menu language and then please confirm with the  key. After this please choose the time zone and your desired pre-programmed channel list or channel scan proceeding in the same way.



Information about changes to the channel list please see chapter **8. Edit Channels** in the Users Manual.

Under **chapter 5.1** you can make yourself familiar with the functions of your remote control.

Under **chapter 6** the TV- as well as Recording- and Playback-Functions of your receiver are described.

3 FEATURES

- Supports SD / HD (MPEG4 AVC/H.264)
- One Common Interface Slot
- One Irdeto Smartcard Slot
- USB PVR Function (by using external HDD)
 - Time Shift Mode (by using external HDD)
- High Definition Video output: HDMI
- Subtitle support : OSD & VBI insertion for TV
- 4-Digit 7-Segment-Display
- Channel sorting by FTA, CAS, Satellite, Alphabet and Network
- EPG : Now and Next and 7 days EPG
- Satellitescan – Simultaneous Scan of 10 Satellites
- Video output resolution: 576p, 720p, 1080i, 1080p
- User selectable output resolution
- Multi language OSD in GB, CZ, SK, D, F, I, ES, NL, PL
- Fast Channel Change
- 5.000 Channels (TV und Radio) programmable
- 8 Favorite List & Unlimited Programs per each
- Channel Edit Function
 - Move, Delete, Favorite Edit
 - Parental Lock, Channel Rename, Channel Skip
- Manual PID- and Network Search
- Optical S/PDIF-Output for Digital Audio or Dolby AC3
- Software Upgrade via OTA
- Multifeed-Function for Operator Subchannels
- Teletext with Sub-Page access
- Standby < 1 Watt

4 HOW TO CONNECT YOUR RECEIVER

Please note: HD Signals are not transferred via RCA-Video– For HDTV Signals and also for the best quality on SDTV please use an HDMI cable where possible.

4.1 Connecting the Receiver to TV by using an HDMI and/or SCART-Cable



- Connect the coaxial cable (Cable from your Satellite Dish) to the connector marked „LNB IN“ at the rear of the receiver.
- Connect an HDMI-Cable between the HDMI-ports of your TV Set and your Receiver.
- Connect the external 12V Power Supply

4.2 Connecting the Receiver to your TV by using RCA cable



- Connect the coaxial cable (Cable from your Satellite Dish) to the connector marked „LNB IN“ at the rear of the receiver.
- Connect the RCA cable to port “Audio L/R” and “Video” of Receiver to the respective RCA ports of your TV Set.
- If the TV has a HDMI input, connect the Receiver & TV using a HDMI cable.
- Connect the external 12V Power Supply

5 HARDWARE:

5.1 Remote Control



	POWER: By pressing this button, the receiver will go into standby mode. When the receiver is in standby mode, it can be awakened by pressing this button again.
	MUTE: By pressing this button, all audio outputs of the receiver are muted. When muted, Audio output can be regained by pressing this button again.
	HELP: Optional Function
	TV FORMAT: By pressing this button you can change the Screen-Format. Should you experience Display problems press repeatedly until your TV Set displays the best picture.
	TV/RADIO: By pressing this button the user can jump between TV and radio lists of the receiver.
	MODE: By pressing this button you can determine the Screen-Aspect Ratio
	0-9 NUMBER: By pressing one of the number buttons (0 - 9), the user can change channel or enter a number to menu.
	ELECTRONIC PROGRAM GUIDE: By pressing this button, the user can see current and forthcoming programming information for each channel. 7-day program information guide is also available by using this button.
	RECALL: return to previously viewed channel
	REWIND: During Playback of recorded files this button can be used to rewind.
	STOP: By pressing this button Playback or Recording can be stopped.
	PLAY/PAUSE: By pressing this button the archive on the connected USB HDD is displayed. During Rewind or Fast Forward this button returns to regular playback. Press PAUSE to halt Playback.
	FAST FORWARD: During Playback of recorded files this button can be used to fast forward
	RECORD: By pressing this button you can start a recording (only if a USB HDD is connected and operational)
SAT	SATELLITE: Open List of Channels sorted by Satellite
	CURSOR UP: By pressing this button, the user can jump to next channel on the channel list. In menu structure, user can move up one row.
	CURSOR LEFT: By pressing this button, the user can decrease the audio volume level of the receiver. In menu structure, user can change between selectable options.



	CURSOR RIGHT: By pressing this button, the user can increase the audio volume level of the receiver. In menu structure, user can change between selectable options.
	CURSOR DOWN: By pressing this button, the user can jump to previous channel on the channel list. In menu structure, user can move down one row.
	OK / ENTER: By pressing this button, the user can confirm a selection or save settings in a menu.
MENU	MENU: By pressing this button, the user can activate the main menu of the receiver.
EXIT	EXIT: By pressing this button, the user can exit from the menu without saving the made changes or go one step back in the menu structure.
	FILE: By pressing this button you can access the recorded files on a connected USB Hard-Disk-Drive
	SLOW MOTION: Slow motion playback
	JUMP Back: Jump forward by 10 Channels in the Channel-List
	JUMP Forward: Jump back by 10 Channels in the Channel-List
	RED / AUDIO: By pressing this button you can choose alternative Audio tracks if provided by the channel operator.
	GREEN / SUBTITLE: By pressing this button you can display subtitles if provided by the channel operator
	YELLOW / SLEEP TIMER: By pressing this button one or more times, the user can determine the time after which the receiver will automatically go into Standby.
	BLUE / TELETEXT: By pressing this button, the user can activate the teletext application.
	WHITE / FAVORITE: By pressing this button you can open the Favorite Channel Lists, if you have previously programmed.
STATUS	STATUS: Optional Function
	INFORMATION. By pressing this button, the user can see present and following information about the currently watched channel.
FIND	FIND: Search for a Channel by entering the first letters of the name.

5.2 FRONT PANEL



1. POWER BUTTON

Switch on- and off (Stand-by).

2. 7-Segment Display

In operation displays the current channel number.

3. FRONT FLAP:

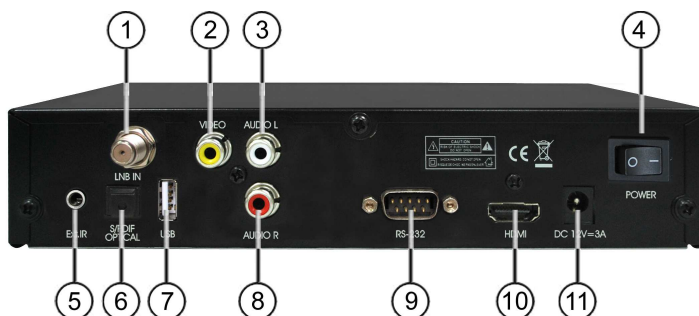
- COMMON INTERFACE SLOT

Behind the Front-Flap you'll find one Common Interface (CI) Slot for Conditional Access Modules (CAM). A CAM in combination with a Smartcard can be used to access scrambled Programmes.

- IRDETO SMARTCARD SLOT

Above the Common-Interface Slot you'll find a Slot for an IRDETO Smartcard. Please insert the smartcard with the chip first facing downwards.

5.3 Rear Panel



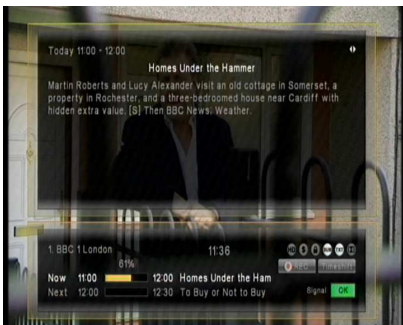
No.	Name	FUNCTION
1	LNB IN	Input for Satellite Signal
2	VIDEO	Video Composite Output
3	AUDIO L	Audio Output Left
4	POWER	AC Power Switch
5	EXT. IR	Input external IR-Sensor (Original part)
6	S/PDIF opt.	Digital Audio Output optical
7	USB	USB 2.0 Port
8	AUDIO R	Audio Output Right
9	RS232	Serial Port for System Upgrade
10	HDMI	High-Definition Digital Video/Audio Output
11	DV 12V = 3A	Connection for external Power Supply

6 WATCHING TV

This chapter describes how to watch TV and listen to Radio using the receiver. Thanks to the advantages of Digital TV transmissions, extra features are added to the broadcast, such as information about the current and next program and extra options such as the ability to choose between different languages for Audio and Subtitling.

6.1 General watching

- Use the CHANNEL UP or CHANNEL DOWN keys to go to the next and previous channel respectively.
- Use the NUMBER keys to input a channel number.
- Use RECALL key on the remote control to open a list of channels that the user was watching before the currently selected channel.
- Use TV/RADIO key on the remote control to toggle between the last selected TV- or Radio Channel.
- Press UP or DOWN keys on the front panel of the receiver to select the next/previous channel from the current channel list.
- Use INFO key to display the information banner about the current program. Press INFO key again to display the information of the current Event. With the CURSOR RIGHT or CURSOR LEFT you can see the next event information. Press again INFO key or the EXIT key to hide the banner and event information.



In Live TV Mode, press the “i” INFO key to display the Information Bar. This contains Information on the current Channel, the current time, the Current and Next Programme on this Channel, Information on the Signal Quality as well as Services broadcast on this Channel (i.e. Subtitles, Teletext) – press the “i” key again and, provided this is broadcast by the operator, you will see detailed information on the current programme – press the < / > keys to change to the next programme information

Please note: Programme information will only be displayed if it is included in the current transmission. Availability and validity of program information is dependent on the broadcaster.



In Live TV Mode press the OK key to open the Channel List – move the Cursor key UP / DOWN to move in the List channel-by-channel - use the < / > keys to jump 10 channels forward / backward - Choose your desired channel with the OK key – Exit the List with the EXIT key.



Find a specific channel by pressing the FIND key on your remote control – enter the first letters of the desired Channel and press the YELLOW key to jump to the search result in the Channel List.



Display Channels in Groups – In the Channel List, press the RED key to display options:

- All TV
- Satellite
- Favourite
- Provider
- CAS (Type of encryption)

In the Channel List you can also sort the Channels by pressing the GREEN key. Options are sorting by numerical, Alphabetical or FTA-to-CAS order.

6.2 Options

Pressing OPTION key will open the "Options" menu.

The Options menu provides user selectable options that are available for the current channel and the current program. Depending on the Programme some of the options can be available or not. Selection from the available choices is made with CURSOR UP or CURSOR DOWN key and confirmation by OK key.

Multifeed: On according Master-Channels you can select from available Sub-Channels. You can exit the Options Menu by pressing the OPT- or EXIT-key.

- Subtitling language (GREEN key): The user can select from available subtitle languages, if more than one exists. Selection from the available choices is made with CURSOR UP or CURSOR DOWN key and confirmation by OK key. Some broadcasters also provide Subtitles in either, DVB- or Teletext Format.
- Audio track (RED key): Some TV channels broadcast multiple audio tracks, for example different languages or AC3 Audio tracks. Selection from the available choices can be made by pressing the CURSOR UP or CURSOR DOWN keys and confirming with the OK key.

Beside alternative tracks, you can set the mode to Stereo or Mono-left or -right. Providing the broadcaster transmits, also AC3 Sound can be chosen.

6.3 EPG (Electronic Programme Guide)

Now & Next as well as 7 days Programme Information

EPG application can be activated by pressing the EPG key when watching a TV-programme or listening to a Radio Channel.

EPG application is divided into two levels. The first level gives an overview of 10 continuous channels with information about present and forthcoming programmes.

By pressing the EPG key once more the second level provides information of all available events for the selected channel for the next 7 days. Availability of Programme information data is dependent on the individual broadcaster.

By again pressing EXIT key you can close the EPG menu.

Navigating on the first level of EPG (Multi-EPG)



The currently active channel and the current programme are highlighted. Depending on how the EPG data is transmitted by the broadcaster it is possible that programme information is not available until one has actually selected the channel. Move the cursor up or down and confirm with the OK key to change to another channel in the list.

Move the cursor left or right to move to another time of the current day. Use the blue key to advance to the next day and use the yellow key to go back by one day.

For your orientation, please also note the timeline indicating the current time in comparison to the programmes.

For more detailed Information on a programme, press the “i” INFO key. Please note that not all broadcasters provide EPG or detailed EPG data.

If you wish to add a programme to your timer for recording, move the cursor to the desired programme and press the REC key on your Remote Control. The event is added to your Record List and, provided a USB Hard-Disk-Drive is connected at the set time, and provided it has enough free space, the event will be recorded to this USB device. Please press the MENU key to return back to the EPG Menu confirming that you want to save the new event in your Record List.

Please note: The receiver requires time to boot from Standby and to check the current time from the satellite signal and to descramble the programme including check for new keys for the inserted Irdeto smartcard.

When adding an event to the record timer, please allow at least 7-8 minutes before the recording is to begin.

Also, when programming more than one event, please allow time in between events accordingly. – When programming events via the EPG timer function, you can manually edit the recording list – also by default, the receiver will add 5 minutes before and 5 minutes after an EPG event – you can edit this padding time (Start and End individually) in the menu MULTIMEDIA / PVR SETTING

Please also note, that any user input during an event (via the remote control or the panel keys) will result in the receiver not returning into standby automatically after the timer event is over.

Navigating on the second level of EPG (Single EPG)



By pressing the GREEN (Toggle) key the second level EPG will appear. This application provides complete EPG information for the selected channel. It is possible to scroll between programs in chronological order for a particular day with the CURSOR UP and CURSOR DOWN keys. Choose another day using the LEFT and RIGHT keys.

After pressing the OK key detailed information for the Programme will be displayed. Press the OK- or the EXIT- key to exit the detailed Information.

Please note: Programme information will only be displayed if provided by the according channel operator.

6.4 EPG-Timer (Timer programming via EPG)

In the Single- or Multi-EPG Mode you have the option to reserve programmes in the timer. Move the cursor to the desired programme and simply press the REC key on your remote control.



An additional window is opened which displays the timer reservations. If a HDD is connected the recording will be made accordingly to the connected external HDD. If a HDD is not connected the receiver will switch to the according channel at the programmed time.

At exiting (EXIT or MENU key) please confirm the Event with the OK key.

Please note: Should two timer reservations overlap, an error message will be displayed. You then need to change or delete one of the two reservations. Use the CURSOR UP and CURSOR DOWN keys to move to the reservation you want to change and either delete a reservation with the RED key or change the start or duration time using the blue key.

6.5 Teletext

Teletext application can be activated/deactivated by pressing the TTX key. The following operations are supported after activating Teletext:

- After activating text page 100 will appear after a short time.
- Specific Teletext pages can be selected using the number keys. If the Teletext page is currently not available, the last selected page will remain on the screen.
- The next Teletext page can be selected with the CURSOR UP key.
- The previous Teletext page can be selected with the CURSOR DOWN key.

6.6 PVR Function

When connecting an external Hard-Disk-Drive to the USB port, the Receiver can be used as a PVR (Digital Personal Video Recorder).

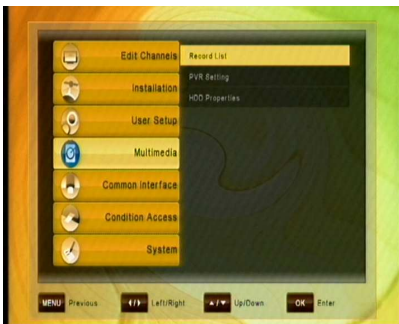
6.6.1 Direct recording

To start a recording press the REC (Record) key, choose a duration with the LEFT / RIGHT keys and confirm with the OK key.

6.6.2 EPG Recording

Via the EPG you can programme a Timer reservation – Please also see 6.4. for more details.

6.6.3 Timer Recording via manual Record List



Alternatively to programming an Event via the EPG, you can also programme an Event manually (Start-/End-Time, Channel) via the RECORD List.

Open the MENU and open the submenu MULTIMEDIA /

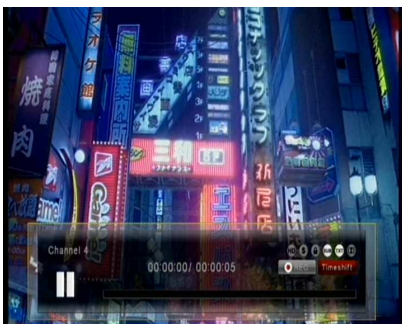
RECORDING LIST (confirm with OK)



Add an Event manually by pressing the YELLOW (ADD) key.

Enter the desired Date, Start and Stop Time and under Channel, choose the Channel Type (TV or Radio) under "Channel List" – Choose the channel you wish to record from under "Channel" and choose whether you want to repeat this recording on a daily or weekly basis under "Mode"

6.6.4 TimeShift-Function



During Live TV you can press the PAUSE key to activate the TimeShift function. Provided you have connected a USB HDD, the Receiver will pause the programme. With the PLAY key you can continue to watch the timeshifted programme. The Information Bar indicates by how much time you are watching time shifted in relation to the live programme.

As with Playback you can FastForward and Rewind within the TimeShift Mode. With the EXIT key or by pressing the STOP key you can stop the TimeShift Mode and resume watching in Live Mode.

6.6.5 Playback



After pressing the FILE LIST key a list is displayed which contains all the recorded programmes on your connected external USB HDD. Use the UP / DOWN keys to move the cursor to the desired programme and confirm with the OK key to start playback. If you have previously watched this specific recording you will be asked if you want to begin playback at the last viewed position.

If supported by the Channel operator, by pressing the INFO key in the file list or during playback details about the recorded programme are displayed.



By pressing the FAST FORWARD or REWIND keys you can increase the playback speed to 2, 4, 8 and 16x in both directions.

To stop playback press the STOP key – depending on the capacity of your USB Drive it may take a little moment to display the FILE LIST again. By pressing the EXIT key you can return to the live channel.

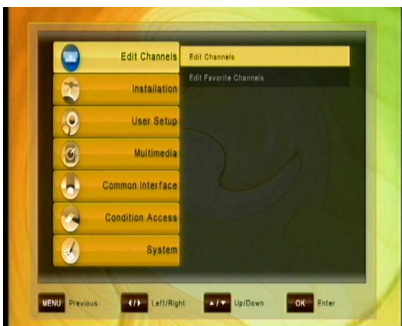
Please note:

Functions such as Recording, Timeshift and Playback require an external HDD to be connected via USB (2.0) and to be ready operational. Only FAT32 formatted Hard-Disk-Drives can be used. Other formats can not be recognized by the receiver. Before recording or TimeShift Operation please make sure that there is enough free capacity on your Hard-Disk-Drive.

7 MENU OPERATION

The main menu can be activated by pressing the MENU key.

Main menu provides access to most important functions and features of the receiver. These are divided into the following Menus. Each Menu contains corresponding sub-menus. The Main Menu consists of:



- Edit Channels
- Installation
- User Setup
- Multimedia
- Common Interface
- Conditional Access
- System

You can move between the Main Menu by pressing the CURSOR UP or CURSOR DOWN key. The available Sub-Menus can be accessed by pressing the CURSOR RIGHT key and confirming using the OK key. You can exit the menu by pressing the EXIT key.

8 EDITING CHANNELS

8.1 Create Channel List



This menu is used to shape your channel list according to your personal preference. Press the MENU key, select Edit Channels by using the RIGHT CURSOR and press OK. Change between TV and Radio Channels by pressing the TV/RADIO key.

The individual functions are:

Command	Key	Function
Delete	RED	Delete the highlighted Channel from the Channel List
Lock	GREEN	Lock and unlock a Channel (i.e. for access by minors)
Skip	YELLOW	Mark a Channel for skipping or deactivate with unskip
Move	BLUE	Move the highlighted Channel to another position within the Channel List
Rename	BLACK	Rename the highlighted Channel
Select	WHITE	Select Channels i.e. for moving an entire group of channels in one go
Find	FIND	Find Channels within the Channel List

Please note: After editing the channels and pressing the EXIT or MENU key you can confirm your new channel list by pressing OK key. If you don't want to save any changes and keep the previous status, cancel the process by pressing CURSOR LEFT, choosing "NO" and confirming with the OK key.

8.2 Edit Favorite Channels



This menu is used to create a lists of your favourite channels. Thus you can create up to 8 different Favorite Lists. Press the MENU key, select EDIT FAVORITE CHANNELS by using the RIGHT and DOWN key and confirm using the OK key.

Use the RIGHT or LEFT keys to jump between All TV and the chosen FAV List.

First select the channels you would like to add to your favorite list using the UP and DOWN keys and press the WHITE Select key to mark one or more channels and press the RED key to add to the chosen Favorite List. If required, use the GREEN A-Z key to sort the channels in alphabetical order or use the BLACK FIND key to find a specific channel from the list.

Within the Favorite List you can delete a Channel from the FAV List by choosing the channel and pressing the RED DELETE key. You can move a Channel using the BLUE MOVE key and select a group of channels by using the WHITE SELECT key and either delete or move the marked Channels

When finished use the MENU or EXIT key to save your changes (confirming with YES) or abandon (choosing NO).

9 INSTALLATION



This menu contains following items:

- Multi Satellite Search
- Satellite Search
- Default Setting

9. 1 Multi Satellite Search



To perform a Multi Satellite Channel Search, please first choose the Satellites you wish to perform your search on. You will notice, after choosing the first satellite, a window will open. Please configure your antenna setting in this Sub-Menu:

Choose between:

DiSEqC 1.0 (up to 4 ports), DiSEqC 1.1 (up to 16 ports), DiSEqC 2.0 (Motor) and USALS (Motor) and allocate the according port where applicable.

After performing the settings for the first satellite, please confirm using the OK key. Then choose the next Satellite you wish to set up and repeat as for the first satellite. In the same way set up all desired satellites that you would like to perform a search on (and assuming your satellite antenna has the according features).



To begin the Search for Channels on the set Satellites press the RED SCAN key and specify whether you would like to search for All Channels, Free-To-Air Channels, Scrambled Channels or Only TV Channels.

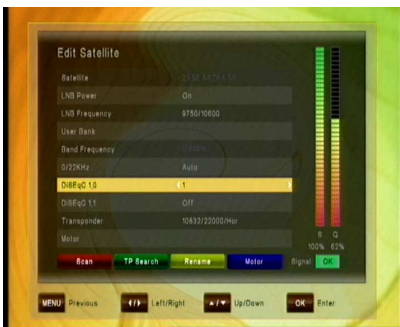
If you would like to perform a Network Search, please change the according Option to "On" – the receiver will then check the up-to-date channel

information as searching services, however, this Search Option will increase the Search time. Begin the Search by pressing RED.

9. 2 Satellite Search



To perform a Channel Search on one Satellite, please choose the Sub Menu Satellite Search. Choose the Satellite you wish to perform the search on and, in case you have not yet set up the antenna, please press GREEN EDIT to make the according changes.



Choose between:

DiSEqC 1.0 (up to 4 ports), DiSEqC 1.1 (up to 16 ports), DiSEqC 2.0 (Motor) and USALS (Motor) and allocate the according port where applicable. Now either begin your search on the entire Satellite by pressing RED - START SEARCH – or choose to search on a single TP – then please press GREEN -

TP SEARCH – by setting the Search Mode in TP Search from Manual to PID, and, assuming that you know the according data, you can also enter specific Video-, Audio- and PCR-PID to search for a single Channel.

9. 3 Edit TP List



In due time, and by new Frequencies constantly being added by the Satellite Operators, some transponder data will need editing. Enter the Sub MENU INSTALLATION / SATELLITE SEARCH, choose your desired Satellite (confirm with OK) and press the YELLOW (TP) key. In the EDIT TP List Submenu you can either manually add a TP (Transponder) by pressing

the GREEN (ADD TP) key or make changes to existing ones. Please use the LEFT / RIGHT keys to move the cursor to the desired TP. Press the BLUE (TP Edit) key to make the required changes (only advised for expert users). If you want to search on only one TP, after choosing the desired TP, you can use the RED (TP Search) key. Here you can also make changes to specific Video-, Audio- and PCR-PIDs after changing the Search Mode to "PID".



9. 4 Default Setting



In this menu, you can delete all channels for TV or Radio. Additionally you can perform a factory reset to set back Channels, the Configuration to the original state as well as perform a Default Setting. Default Settings can be chosen for:

- Delete Channels: Choose to delete either All Channels, TV- or Radio-Channels only
- Factory Reset: The original Factory Programming is re-loaded either for all All Parameters (Default Setting), only Channels or only Configuration

10 USER SETUP



Please use the CURSOR keys to select:

- Language Setting
- Time Setting
- Parental Control
- A/V Control
- OSD Setting
- Automatic Power Down

10.1 Language Setting



- Menu Language: Select the preferred language for the system menus.
- Audio Language (1st / 2nd): Some TV programs send multiple audio tracks, for example in two different languages. If there are no audio tracks available that match your settings, another language may be used instead.
- Subtitle Language (1st / 2nd): Select the preferred language for the subtitling and Programme information.
- EPG Language: Select the preferred language for the Electronic-Programme-Guide

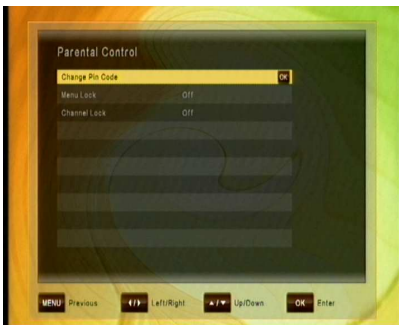
10.2 Time Setting



This menu contains Time Setting, Summer Time and GMT Offset. Select “Manual” or “Auto” mode using the CURSOR LEFT or CURSOR RIGHT keys and use OK to confirm. If you wish to change time and date manually in time offset menu, please set the option to “Manual”. Also Summertime can either be set to „Auto“, „Off“ or „On“.In „Auto“ mode the Receiver automatically changes to and from Summertime at the according dates.

This menu contains Time Setting, Summer Time and GMT Offset. Select “Manual” or “Auto” mode using the CURSOR LEFT or CURSOR RIGHT keys and use OK to confirm. If you wish to change time and date manually in time offset menu, please set the option to “Manual”. Also Summertime can either be set to „Auto“, „Off“ or „On“.In „Auto“ mode the Receiver automatically changes to and from Summertime at the according dates.

10.3 Parental Control



To use the Parental Control function you will be asked to enter your access PIN code. All parental control features work on a locking concept with the PIN code as your entrance key.

The default PIN code is set to 0000!

- **Change PIN code:** Use this function to change your PIN code to some other four digit number.

New PIN: Enter a new four digit PIN code by pressing the OK key and using the number keys on your remote control.

Verify new PIN code: Re-enter the same new four digit PIN code once again to verify the new PIN code.

- **Menu Lock:** After turning the Menu Lock to “ON”, the complete Menu will require your PIN code to be entered before opening
- **Channel Lock:** After turning the Menu Lock to “ON”, Channels that you set a lock on will require your PIN code to be entered before opening

10.4 A/V Control



In the Audio/video menu, you can modify the properties of the audio and video signals to suit your TV and audio equipment.

- **TV-Type:** Please select the video format consistent with your TV.
- **Aspect ratio:** User can inform the receiver about the display aspect ratio of the TV that is connected to the receiver. Possible choices are Auto, 4:3, 16:9 aspect ratios.
- **Display Format:** If you select the display aspect ratio of TV as “4:3”, then also the preferred aspect ratio conversion scheme for cases in which the transmitted Programme is in “16:9” format can be chosen. The options are:
 - **Pan & Scan:** The receiver interprets pan & scan vectors encoded in the Programme and crops the 16:9 input signal for display on 4:3 TV.

- Letterbox: In this mode the original aspect ratio of the 16:9 input video signal is preserved, thus there are vertical black bars on the top and bottom of the screen.
- Ignore: Use this setting, if your TV set handles the aspect ratio conversion.
- Video Format: Please choose from the available resolutions 1080p / 1080i 720p or 576p – for 1080p you will need to confirm with the numeric key “1” on your Remote control – **a TV set that does not support 1080p (Full-HD) will not be able to display this setting.**
- AC3: Please choose between Off, SPDIF, SPDIF + HDMI
- Channel Switch Mode: When changing channels, you can choose with this setting whether the screen is to turn black before the new Live Channel appears or if you prefer the last live picture of the previous Channel to remain on the screen until the new Live Channel appears.

10.5 OSD Setting



In this Submenu you can adjust the display time (i.e. time of the appearing of the info bar or other on-Screen Messages) and the OSD transparency (in %) over the Live picture.

10.6 Automatic Power Down



In this Submenu you can choose the time after which the receiver will go into Standby (Sleep-Mode). Provided the receiver is not undertaking any task such as recording, and also provided there is no input via the remote control or the front panel keys, the receiver would go into Standby after the set time. Options are: Off (None), 0:30m ~ 3:00h in 30min. steps

11 MULTIMEDIA (only with a connected and operational external HDD)



In this Sub Menu you can make some settings for your connected Hard-Disk-Drive for the PVR Operation and also format the HDD. The Sub Menu includes the following functions:

- Record List (Timer)
- PVR- Settings
- HDD-Settings

11.1 Record List (Timer)



A Timer is used to Programme the Receiver to switch on and off again at certain times and to tune to a specified channel. Timers are normally used to record a TV Programme on the video recorder or to pre-programme the receiver for other reasons (i.e. wake-up). A set timer causes the receiver to wake up from standby mode at the specified time or change the channel to the specified one.

Please note: Timersettings that have been programmed in the EPG (see EPG-Timer point 6.4) are automatically marked in the Timerlist as “Recording” and can be edited (GREEN) or deleted (RED) here.

In the Record List Submenu, please press YELLOW – ADD to manually add an Event to the timer.

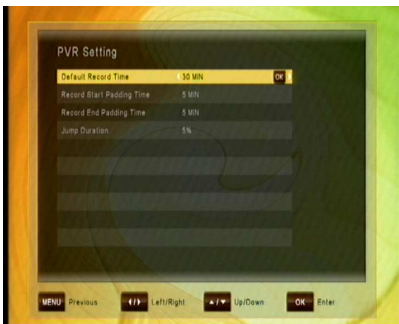


If an external HDD is connected to the USB port and is operational, recordings can be made directly on the HDD. Please enter:

- Date
- Start Time
- Stop Time
- Channel List (TV / Radio)
- Channel
- Mode (Once / Daily / Weekly)

Save the newly set Recording Event by pressing the BLUE key.

11.2 PVR Settings



In this Submenu you can select the default duration for direct recordings. For direct recordings a window appears after pressing the REC key which displays this pre-defined setting. Before beginning the recording this can be adjusted. The 1st suggested option is automatically the end time of the current event that the receiver draws from the EPG Information – if provided by the TV Operator.

Other Options in this Menu are:

- Record Start Padding Time: Automatically adds time before your recording to cater for possible delays in the broadcast – choose between None, 5, 10, 15, 20, 25 and 30 minutes
- Record End Padding Time: Automatically adds time to the end of your recording to cater for possible delays in the broadcast – choose between None, 5, 10, 15, 20, 25 and 30 minutes

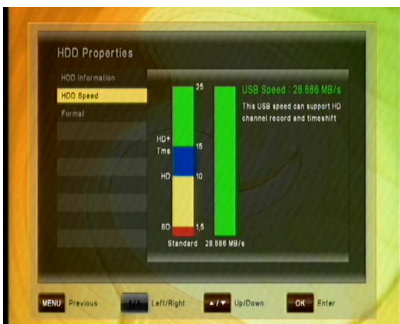
- Jump Duration: Set the size of “jumps” to be performed when you press the ⏮ / ⏭ keys during playback – Choose between 1%, 5%, 10%, 20%

11.3 HDD Properties



In this Sub Menu you can see all information about your connected Hard-Disk Drive as well as an option to format the HDD.

HDD Information displays the File System, the Total-, Used- and Free-Size of the connected USB Hard-Disk-Drive



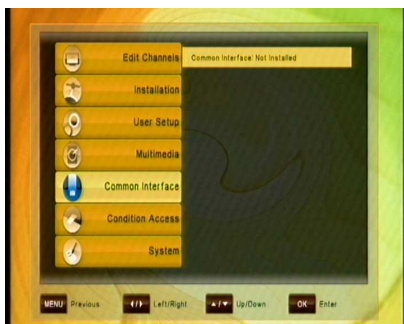
HDD Speed gives you the option to perform a speed test to verify that the speed of your connected USB Hard-Disk-Drive suits the tasks you wish to perform.

- SD: For recording of SD channels
- HD: For recording of HD channels
- HD + Tms: For recording of HD channels and TimeShift Playback

Formatting After confirming with the OK key the HDD is formatted.

Please note: All files on the Hard-Disk-Drive will be deleted when formatting.

12 COMMON INTERFACE



This receiver is equipped with one slot for Common Interface (CI).

1. Open the flap on the front panel of the receiver
2. Insert the smartcard into the CI module, and the CI module into the slot.

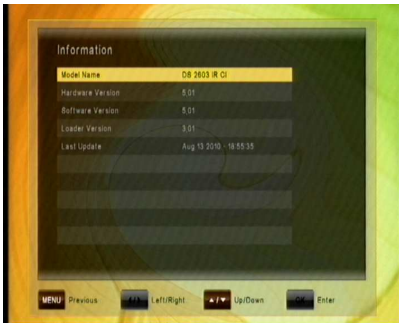
You can check the information of CI module using this Sub Menu

13 CONDITIONAL ACCESS



After opening the smartcard settings the menu will display details of the inserted IRDETO Smartcard. Information includes settings and details on subscriptions, age settings and changing of the PIN-Code of the smartcard.

14 SYSTEM



The System Menu has 3 Submenus:

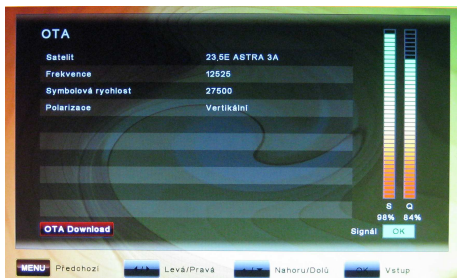
- Information
- Software Upgrade
- Default Setting

The Information Submenu is used to display information about the receiver and its hardware, software and loader.

14.1 Software Update

OTA Software Update

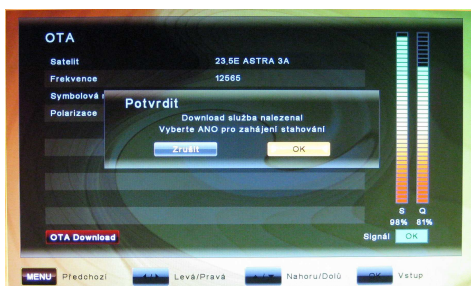
OTA is designed to be able to update your receiver-Software via Satellite (Over-The-Air) – Please first choose a TV Channel on the Astra 3A Transponder 12565 H – for example STV1, STV2 or STV3



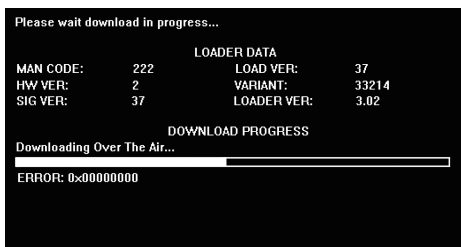
Press the MENU key and open the Sub-Menu SYSTÉM / OTA using the keys:



If the initially grey **OTA Download** appears with a RED background a new Software is available for download.



Press the RED (AUDIO) key and after a few seconds you will be asked to confirm the download by pressing the  key.



After confirming, the receiver restarts and downloads the new Software from Satellite

Updating the receiver Software may take 25 minutes or more - **Warning! Please never turn the receiver off during the upgrading process! The receiver will re-boot automatically after finished.**

14.2 Default Setting



In this menu, you can delete all channels for TV or Radio. Additionally you can perform a factory reset to set back Channels, the Configuration to the original state as well as perform a Default Setting. Default Settings can be chosen for:

- Delete Channels: Choose to delete either All Channels, TV- or Radio-Channels only
- Factory Reset: The original Factory Programming is re-loaded either for all All Parameters (Default Setting), only Channels or only Configuration

15 TROUBLE SHOOTING

Problem	Possible causes	Remedy
LED on front panel does not light	AC Power cord disconnected	Connect power cord properly into the power socket
No picture or sound	Wrong connection of the Video/audio output to TV input terminal	Connect correctly with HDMI cable or RCA or RF cable
	Wrong connection of antenna cable	Connect the antenna cable correctly
	No signal or weak signal	Check the cable connections and Satellite-Dish alignment
	Wrong setting of channels Information in MENU screen	Type the setting value correctly
Black-and-white screen or V-Hold	Your TV mode is different from broadcasting mode	Use TV of same mode Use the NTSC/PAL converter Connection to the receiver and TV
The remote control is not working	Battery exhausted	Change the batteries
	Fluorescent light interfering with the remote control	Switch off the light
	Remote control is incorrectly aimed	Aim the remote control at the receiver
Distorted menu screen	Too high brightness and contrast level of TV set	Adjust brightness and contrast to low level
Not working	Process down	Switch off the receiver, remove the power cord. After a short moment re-insert the power cord and switch on again.

16 TECHNICAL SPECIFICATIONS

Tuner

Input	F-Type
IF Inputfrequency	950MHz to 2150MHz
Input Level	-65 dBm~-25 dBm
LNB Power	13 /18VDC / 500mA Max
DiSEqC Control	Unicable, 1.0, 1.2 & USALS compatible
Band Switch	22KHz Tone(22 +/- 4KHz,Amplitude :0.6 +/- 0.2V)
Modulation method	LDPC/BCH(DVB-S2) 8PSK/QPSK, DVB-S QPSK
Symbol Rate	LDPC/BCH(DVB-S2) 8PSK/QPSK :10~30Msps DVB-S QPSK : 1~45Msps
Viterbi Decoding Rate	1/2,2/3,3/4,5/6 and 7/8
Bandwidth	36MHz
LDPC/BCH	Punctured Code ,1/2,2/3,3/4,3/5,4/5,5/6,8/9,9/10 in DVB-S2

MPEG Stream A/V Decoding

Demultiplex	According to ISO/IEC 13818-1 (MPEG-2 System)
Input Stream	Max. 90Mbit/s
Aspect Ratio	4:3(default), 16:9 letterbox
Video Decoding	ISO/IEC 13818-2 (MPEG2 Video) MP@HL, ISO/IEC 14496-10 HP@L4
Video Resolution	576p, 720p, 1080i or 1080p
Audio Decoding	ISO/IEC13818-3 (MPEG2 Audio/MUSICAM), Dolby AC-3
Audio Mode	Single Channel / Dual Channel, Stereo, Joint Stereo
Video Output	HDMI, RCA



Front Panel

Display	7-Segment Display
1 Common Interface	
1 Irdeco card reader	

A/V Output

Digital Output	HDMI
Audio RCA	2 Outputs left and right
Audio Digital	S/PDIF (optical)

Rear Side

Input	F-Type-Connector
Video, Audio-L, -R RCA	Video, Audio L, Audio R
S/PDIF	optical
HDMI	1.3
USB	1 rear side USB 2.0 Port
IR Connector for external IR Sensor	
1 RS 232 Port	